

## ABSTRACT OF THE DISCLOSURE

A low profile intravascular electrophysiology (EP) device for the formation of linear lesions which has particular utility in the treatment of atrial fibrillation and flutter. The EP device of the invention has an elongated shaft with a proximal section, a distal section, and a plurality of at least partially exposed electrodes disposed on an outer surface of the distal section. The electrodes are spaced along a length of the distal section with at least one temperature sensor located between adjacent electrodes. High frequency, e.g. RF, electrical energy delivered to the electrodes on the distal shaft section of the EP device will form a linear lesion which terminates the fibrillation or flutter.

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